

REMARKS

Claims 1, 6-11, 14-16, 18, 20, and 25-38 are pending in the application. Claims 1, 6-11, 14-16, and 18 have been amended. New claims 35-38 have been added. Support for the amendments and new claims can be found in the specification at, e.g., page 2, line 25, to page 3, line 24; page 11, lines 18-23; and page 13, lines 7-19. These amendments add no new matter.

35 U.S.C. §102(b) (Anticipation)

At pages 2-3 of the Office Action, claims 1, 9, 10, 11, 18, 20, and 28-31 were rejected as anticipated by Mastrangelo et al. (2000) Biotech. Bioeng. 67:544-54 ("Mastrangelo").

Applicants respectfully traverse the rejection in view of the claim amendments and the following remarks.

Amended independent claim 1 is directed to a stable cell line comprising a Chinese Hamster Ovary (CHO) cell comprising an increased amount of Bcl-x_L protein, wherein the cell comprises a first expression vector encoding a polypeptide that is a secreted protein, and wherein the cell produces an increased amount of the polypeptide as compared to a cell that does not comprise an increased amount of the Bcl-x_L protein. Similarly, amended independent claim 18 is directed to a method of producing a polypeptide in a stable cell line comprising a CHO cell comprising an increased amount of Bcl-x_L protein.

Mastrangelo describes the ability of Bcl-2 and Bcl-Xl to limit apoptosis upon infection of cells with alphavirus vectors. As detailed in Mastrangelo, cell lines infected with alphavirus vectors undergo apoptosis upon infection, and expression of Bcl-2 or Bcl-Xl in those cells delays the onset of cell death resulting from use of the viral expressions systems. The expression system described by Mastrangelo is a transient one, with variations observed over time both in percentages of cell viability as well as secreted protein levels. In contrast, the cell line of claim 1 (as well as the cell line used in the method of claim 18) is a stable cell line. Mastrangelo does not disclose a stable cell line comprising CHO cells comprising an increased amount of Bcl-x_L protein. As a result, Mastrangelo does not anticipate independent claims 1 or 18 or claims 9, 10,

11, 20, and 28-31 that depend directly or indirectly therefrom. Applicants request that the Examiner withdraw the rejection of the claims.

35 U.S.C. §103(a) (Obviousness)

At pages 3-4 of the Office Action, claims 6, 7, 25, and 26 were rejected as unpatentable over Mastrangelo in view of Sinacore et al. (1996) Biotech. Bioeng. 52:518-28 ("Sinacore").

Sinacore was cited as disclosing a strain of CHO cells that is capable of growth in serum-free suspension culture. However, Sinacore provides nothing that supplements the deficiencies of Mastrangelo detailed above with respect to independent claims 1 and 18. Accordingly, once independent claims 1 and 18 are held allowable, dependent claims 6, 7, 25, and 26 should also be in condition for allowance.

At page 4 of the Office Action, claims 14-16 and 32-34 were rejected as unpatentable over Mastrangelo in view of Kim et al. (2000) Biotech. Bioeng. 71:184-93 ("Kim").

Kim was cited as disclosing the use of CHO cells to produce an antibody. However, Kim provides nothing that supplements the deficiencies of Mastrangelo detailed above with respect to independent claims 1 and 18. Accordingly, once independent claims 1 and 18 are held allowable, dependent claims 14-16 and 32-34 should also be in condition for allowance.

At pages 4-5 of the Office Action, claims 8 and 27 were rejected as unpatentable over Mastrangelo in view of Sinacore (as applied to claims 1, 7, 18, and 26) and further in view of Kim.

Kim was cited as disclosing the use of butyrate in recombinant CHO cell cultures to achieve high level expression of foreign proteins. However, Kim provides nothing that supplements the deficiencies of Mastrangelo detailed above with respect to independent claims 1 and 18. Accordingly, once independent claims 1 and 18 are held allowable, dependent claims 8 and 27 should also be in condition for allowance.

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CONCLUSIONS

Applicants respectfully submit that all grounds for rejection have been overcome and that all claims are now in condition for allowance.

Please apply any charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 13751-036US1.

Respectfully submitted,

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